



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

NPL-04-3-L31

JUL 22 1987

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Arkwood, Inc. Site
National Priorities List

FROM: Henry L. Longest II, Director
Office of Emergency and Remedial Response

TO: File

RECEIVED
7/24/87

On Monday, June 29, 1987, a meeting was held in the office of Congressman John Hammerschmidt to discuss the inclusion of the Arkwood Inc. Site on the National Priorities List (NPL). The Arkwood Site is located in Omaha, Arkansas, and was proposed to the NPL on September 18, 1985.

The meeting was requested by Congressman Hammerschmidt on behalf of his constituent C.C. Grisham, the former owner of the Arkwood Inc. The purpose of this memo is to document the issues discussed at the meeting.

Besides myself, the following individuals were in attendance at the meeting:

Congressman John Hammerschmidt	
Dr. J. Winston Porter	Assistant Administrator for the Office of Solid Waste and Emergency Response (OSWER)
Ms. Lynn Pirrozelli	Special Assistant to Dr. Porter
Hallie C. Ormond	Former Arkwood landowner
C.C. Grisham	General Manager of Arkwood, Inc.
Mary Jo Grisham	Wife of C.C. Grisham
Mary F. Burke	Current Arkwood landowner
Bill F. Doshier	Attorney representing C.C. Grisham

During the meeting, Mr. Grisham expressed two major concerns regarding this site. First, Mr. Grisham stated that the Environmental Protection Agency (EPA) Region VI has stated or implied that the Arkwood Site has already been added to the final NPL. Dr. Porter and I both reassured

9456960



Mr. Grisham that this was not the case. We explained that the site was currently proposed to the NPL, and that, as had already been pointed out by Region VI, an error had been made in the original evaluation of this site for the inclusion on the NPL. We informed Mr. Grisham that the Agency was currently reviewing data and information on the site. Mr. Grisham provided the attached documents to support his position.

Mr. Grisham then asked to obtain the revised Hazard Ranking System (HRS) documents for the site. I explained that the revised documents would only be available at the time a formal Agency decision is reached to either place the site on the NPL or drop the site from further consideration for listing at this time. I further explained that the development of the HRS score for a site is a deliberative rulemaking process. The HRS is a technical evaluation model which estimates relative risks at waste sites. The conditions at a site are evaluated and are represented numerically in the HRS documents. The documents and data used to support the HRS evaluation are available in the docket at the time that a site is proposed to the NPL.

Next, Mr. Grisham stated that he was being harrassed by EPA and the Department of Justice (DOJ). According to Mr. Grisham, Mass Merchandisers, Inc. (MMI), the current owner/operator of the facility, has entered into a Consent Agreement with EPA. Mr. Grisham asserted that EPA and DOJ are pressuring Mr. Grisham to sign the agreement as well. Mr. Grisham claimed that he had been told by DOJ that if he did not sign the agreement he could be fined up to \$25,000.00 per day. Mr. Grisham stated that he did not want to sign the agreement because he believed that MMI intended to sue him for the cost of the cleanup at the site.

In a related matter, Mr. Grisham stated that he would grant site access to anyone who wished to go onto the site provided that it was in no way related to his being a party to the Consent Agreement between EPA and MMI. Before granting site access, Mr. Grisham said he wanted "due process."

Mr. Grisham contended that the site was not presenting a threat to the environment. He stated that wells located both on and off the site are not contaminated. Mr. Grisham stated that a nearby spring which had been contaminated, was now clean.

Dr. Porter and I assured Mr. Grisham and the others present that EPA would carefully evaluate all the information currently available on the site before making a final decision as to whether the site should be added to the final NPL.

Attachment

#2M RI/FS (1.5 \$3M)

Allow exam for data

HANDOUT FOR MEETING IN WASHINGTON, DC,
WITH EPA OFFICIALS

- will not appear here
suit / consent order

RE: ARKWOOD SITE
OMAHA, ARKANSAS

PRESENTED BY:
BILL F. DOSHIER
Doshier & Bowers Law Firm
P. O. Box 1797
Harrison, AR 72601
(501) 741-6166

THE CLIENT:
HALLIE C. ORMOND, Age 82,
C. C. GRISHAM, MARY JO
GRISHAM, ARKWOOD, INC.,
and MARY F. BURKE (landowner)

MFI not represented in inst.

1. BACKGROUND INFORMATION
2. EPA PROCEEDING AS IF SITE IS ON NATIONAL PRIORITIES LIST
 - A. AO
 - B. RI/FS
 - C. Public Announcements and Hearings
 - D. Suit for access
3. FALSE CALCULATIONS FOR NPL RANKING
 - A. Admitted erroneous figures
 - B. Remain on list
 - C. Nondisclosure of present calculations
 - D. Client fears continuous use of false information
 - E. Prior actions preclude fair reranking now
4. MINIMUM POLLUTION-STATE SITE
 - A. Evidence of experts
 - B. One off site release
 - C. No injuries, no other problems
 - D. No imminent danger
 - E. State Law adequate - suit already filed
 - F. Not sufficient for superfund attention
5. OVERKILL BY EPA
 - A. Evidence indicates EPA intends to cause expenditure of multi-millions on site study and cleanup.
 - B. Responsible parties willing to correct problems under State law.
 - C. Penalty for non-cooperativeness - adopted a slanted work plan.
 - D. Ruination of private citizens
 - E. Threats and harassment - Reputation destruction
(1) client comments

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VI
DALLAS, TEXAS

IN THE MATTER OF:	§	
	§	
MASS MERCHANDISERS, INC.	§	
	§	
	§	
REGARDING THE ARKWOOD, INC. SITE	§	ADMINISTRATIVE ORDER
OMAHA, ARKANSAS	§	ON CONSENT
	§	
	§	
Proceeding Under Section 106(a)	§	DOCKET NUMBER
of the Comprehensive Environ-	§	CERCLA VI-6-86
mental Response, Compensation,	§	
and Liability Act of 1980	§	
(42 U.S.C. §9606(a))	§	

ADMINISTRATIVE ORDER
ON CONSENT

I. JURISDICTION

This Consent Order is issued pursuant to the authority vested in the President of the United States by Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. §9606(a), and delegated to the Administrator of the United States Environmental Protection Agency ("EPA") on August 14, 1981, by Executive Order 12316, 46 Fed. Reg. 42237, and further delegated to the Assistant Administrator for Solid Waste and Emergency Response and the Regional Administrators by EPA Delegation Nos. 14-14 and 14-14-A, the latter of which was signed on April 16, 1984.

Respondent, Mass Merchandisers, Inc. ("MMI") agrees to undertake all actions required by the terms and conditions of this Consent Order. MMI consents to and will not contest EPA jurisdiction regarding this Consent Order.

FROM
RI/FS

SECTION 1 - WORK PLAN SUMMARY

This Work Plan has been developed for the Remedial Investigation and Feasibility Study (RI/FS) at the Arkwood, Inc. site near Omaha, in north central Arkansas. The Arkwood site was the location of a small, single cylinder wood treating plant. The plant was constructed in 1962 and closed in 1984. Mass Merchandisers, Inc. (MMI) operated the plant from 1973 to 1984. In 1981, detectable levels of pentachlorophenol (PCP) were found in two springs and two domestic wells in the immediate vicinity of the plant site. Since 1981, MMI has voluntarily cooperated with the Arkansas Department of Pollution Control & Ecology (ADPC&E) in investigating ground-water conditions beneath and potential sources of contamination emanating from the site.

* The Environmental Protection Agency (EPA) Update No. 4 to the National Priorities List added the Arkwood site in late 1985. An Administrative Order on Consent was entered into by EPA and MMI on May 15, 1986. The Consent Order required an RI/FS to be performed at the Arkwood site.

This Work Plan provides a scope of work for the remedial investigation activities at the Arkwood site. The purposes of the remedial investigation are: (1) to determine the nature and extent of the problems at the site; and (2) to gather all necessary data to support the feasibility study. The purpose of the feasibility study is to develop and evaluate remedial alternatives for the site.

This plan has been developed in accordance with the EPA RI/FS guidance documents (References 1 and 2). The approach presented in this Work Plan is consistent with the National Contingency Plan (NCP) requirements to determine the appropriate extent of response and to ensure that remedial measures are cost effective.

1.1 Objectives of the RI/FS

The objective of the remedial investigation is to determine fully the nature and extent of the threat to public health, welfare or the environment caused by the release or threatened release of pollutants from the site. The following primary objectives have been defined for the remedial investigation:

- To characterize the wastes present at the site, including identifying the locations and probable quantities of subsurface wastes through the use of geophysical methods;

Chronology of Events at Arkwood Plant, Omaha, Arkansas

FROM
RI/FS

1986

May 15 Mass Merchandisers, Inc. (MMI) and Region VI Environmental Protection Agency (EPA) sign Administrative Order on Consent for Remedial Investigation/Feasibility Study (RI/FS) for the Arkwood, Inc. site near Omaha, Arkansas.

1985

October The Arkwood, Inc. in Omaha, Arkansas, is added to the National Priorities List in EPA's Update No. 4.

September Meeting was held between Mass Merchandisers, Inc. (MMI), McKesson Environmental Services (MES) and the Arkansas Department of Pollution Control and Ecology (ADPC&E) to present status of site investigation and present remedial action plans.

September 18 The Arkwood, Inc. site in Omaha, Arkansas, is proposed for addition to the National Priorities List in EPA's Update No. 4, published in 50 Federal Register 37950 (date of publication September 18, 1985), (based on a Hazardous Ranking System score of 34.21).

June 4-5 Geraghty & Miller, Inc., IT Corporation, McKesson Environmental Services collect water samples from wells and springs, soil samples, and samples of sludge for waste characterization, preliminary hydrogeologic investigation.

April 14-17 Geraghty & Miller, Inc. collects water samples from springs and wells, performs initial soils boring program.

January 11 Twelve-year lease from Hallie C. Ormond expires.

1984

December 7-19 McClelland Engineers collect additional surface and ground-water samples for analysis of PCP content.

railroad tunnel spring, the sinkhole, near the concrete pad over the sinkhole, near the treating room, and the wood chip pile at the east end of the yard. The samples from the known waste source areas showed concentrations of PCP ranging from 16 ppm to over 7,000 ppm. The only spring sample showing a significant amount of PCP was Cricket Spring, with 4.3 ppm. The remainder of the spring and well water samples showed less than detectable quantities. This data has been summarized in Table 2-3.

On June 11, 1985, ADPC&E sent to attorneys for MMI and Mr. Ormond (the property owner) a proposed Administrative Order on Consent for an RI/FS at the Arkwood site. Before agreement was reached on performing the RI/FS under the ADPC&E Consent Order, the Arkwood site was proposed for addition to the Superfund National Priorities List, Update No. 4 in September, 1985. The Arkwood site was added to the National Priorities List in late 1985.

On May 15, 1986, MMI entered into an Administrative Order on Consent with Region VI of the Environmental Protection Agency (EPA). This RI/FS Work Plan has been prepared in accordance with that Consent Order.

2.2 Task 2 - Plans and Management

2.2.1 Approach to the RI/FS

The Arkwood site is owned by people not bound by the Consent Order signed between EPA and MMI. The owners have granted limited access periodically.

Most of the domestic wells within a mile of the plant have been tested; only three wells located in a very small area between the plant and Cricket spring (to the west) showed any detectable contamination. It is believed that water entering this shallow ground water system flows laterally off site and entered deeper water supply wells through uncased portions of the wells. The flow occurs in interconnected solution cavities in the limestone formation. Ground water emerges as springs along Cricket Creek (about 400 yards west of the plant site) and Walnut Creek (about 400 yards east of the plant site).

A comprehensive phased investigative approach has been developed. The investigative approach takes into account the sampling and testing to date, and includes 2 phases. Phase 1 includes intensive sampling and characterization of the site and the surface and ground-water quality in the area; Phase 2 includes optional interim soil isolation of obviously impacted soils, and additional ground- and surface-water monitoring.

SUPERFUND FACT SHEET

Arkwood, Inc.
Omaha, Arkansas

REMEDIAL INVESTIGATION

November 1986

INTRODUCTION

In September 1985, the Arkwood, Inc. site was added to the National Priorities List (NPL) of hazardous waste sites that pose a potential threat to public health and the environment. As an NPL site, it became eligible for federal cleanup funds provided under the Comprehensive Environmental Response, Compensation and Liability Act, commonly called Superfund. NPL sites are investigated to determine the characteristics of the site including:

- Extent and severity of contamination in the soil, surface water, and groundwater
- Location of the contamination
- Appropriate solutions to the problem to reduce or eliminate the threat to public health and the environment
- Parties responsible for the contamination

This process is called a Remedial Investigation and Feasibility Study (RI/FS). The RI/FS phase is now beginning at the Arkwood site. This fact sheet is the first in a series that EPA will issue to inform the area residents about the activities, study findings, and opportunities for public involvement.

SITE DESCRIPTION

The Arkwood site covers approximately 20 acres on the Missouri-Pacific's Crickett Railroad siding, one-half mile southwest of Omaha in Boone County, Arkansas, see Figure 1. The site is located in an excavated area at the head of a valley approximately 1,000 feet west of U. S. Highway 65, north of Crickett Road.

The site consisted of a millwork shop, a wood treating plant which used pentachlorophenol (PCP) and creosote, and a storage yard for the treated wood products prior to sale. The majority of buildings and tanks at the site have recently been removed. There is also a large pile of sawdust and woodchips located in the southeast portion of the site.

EPA Officials to Meet with Omaha Officials on Arkwood

OMAHA — A representative from the Environmental Protection Agency will meet with the school board and city officials next month to discuss contamination of the closed Arkwood lumber treating plant near here.

Ellen Greeney, with the EPA's Dallas, Texas office will attend the school board's regular meeting Dec. 8 at 7 p.m. to discuss the agency's investigation into the matter, said

Omaha Superintendent Dr. Bill Lewis.

According to an EPA fact sheet, in Sept. 1985, the Arkwood site was added to the National Priorities List of hazardous waste sites that pose a potential threat to public health and environment.

As an NPL site, it became eligible for federal cleanup funds provided under the Comprehensive Environmental Response, Compensation and Liability Act, more commonly called Superfund.

NPL sites are investigated to determine the characteristics of the site including:

- Extent and severity of contamination in the soil, surface water and groundwater.
- Location of the contamination.
- Appropriate solutions to the problem to reduce or eliminate the threat to public health and the environment.
- Parties responsible for the contamination.

This process is called a remedial investigation and feasibility study, which is now beginning at the Arkwood site.

An administrative order on consent was signed in May authorizing Mass Merchandisers Inc. to conduct a study under EPA oversight.

A draft workplan was submitted by MMI to EPA in July 1986 and this document has been reviewed and is undergoing revision.

Field investigations are expected to begin this winter with completion scheduled for 1988.

EPA will hold a public meeting in Omaha to explain the results of the investigation and outline possible problem solutions.

The Arkwood site consisted of a millwork shop, a wood treating plant that used pentachlorophenol and creosote and a storage yard for the treated wood products prior to sale.

The Arkwood plant was built and started operations at the site in the early 1960s.

In 1973, the owner of Arkwood leased the treatment plant and the land to Mass Merchandisers. The facility operated from 1973 until treatment operations ceased in June, 1984, at which time MMI sold or removed the remaining inventory and process materials.

Last January, the 12-year lease expired and was not renewed. The plant has not operated since that time.

Samples taken from sawdust and woodchip piles at Arkwood indicate that a part of the pile is contaminated with PCP, according to the fact sheet.

The Arkansas Department of Pollution Control & Ecology detected PCP in samples taken from local water wells, natural springs in the area and nearby Walnut Creek.

In 1982, MMI drilled replacement wells for two nearby residents and retained a consulting firm to conduct a geohydrological study in the area.

About 660 persons within a 3-mile radius of the site depend upon private wells for drinking water.

Page 14A

ARKANSAS GAZETTE Wednesday, February 4, 1987

EPA denied access to contaminated site

Legal action against landowner considered

SPECIAL TO THE GAZETTE
HARRISON — Environmental Protection Agency officials told neighbors of a Superfund site in north Boone County Monday night that the landowner was blocking access to the contaminated property.

They said they were considering legal action against Hallie Ormond of Harrison, owner of the old Arkwood wood treatment plant a half-mile south of Omaha. Ormond could not be reached for comment Tuesday.

The Arkwood site, one of 10 hazardous Superfund sites in Arkansas, is contaminated with cancer-causing pentachlorophenol, which has spread to two now-abandoned wells and a spring near the plant site.

Cleanup study planned

Mass Merchandisers, Inc., which operated the plant for the last 12 of its 23 years under a lease from Ormond, has signed a legal agreement with the EPA to finance a two-year study of the contamination.

The study will be used to create a cleanup plan.

EPA officials told a meeting of 50 people in the Omaha school cafeteria Monday night that Ormond was denying Mass Merchandisers and the EPA access to the site, but they expected to have access within four months.

They also said Ormond had covered contaminated areas with dirt and planted grass without their knowledge last fall. Ruth Israel of the Dallas EPA office said that might make the cleanup more expensive, but would not impede it.

Also named in state suit

Ormond, Mass Merchandisers and others also are named in a state Pollution Control and Ecology Department suit seeking a cleanup order. Phil Delsch, a lawyer for the Department, said when he filed the suit that Mass Merchandisers' agreement covered only the study and the Department wanted a court order forcing all responsible parties to actually clean up the site.

Residents of Omaha Briefed About Plan For Arkwood Site

By Ginger Shiras
Of the Times Staff

Environmental Protection Agency officials told Omaha residents Monday night that Hallie Ormond of Harrison was blocking access to his contaminated Arkwood property in Northern Boone County.

They said they were considering court action against Ormond.

Ormond could not be reached for a response Tuesday morning.

The Arkwood site is one of 900 in the nation — 10 in Arkansas — designated as Superfund sites because of serious contamination that has spread to two wells and a spring near the Arkwood property.

The contamination at Arkwood is from cancer-causing pentachlorophenol, which was used to treat wood at Arkwood a half miles south of Omaha from 1962 to 1985.

Mass Merchandisers, which ran the operation for the final 12 years under a lease from Ormond and his son-in-law, C. C. "Bud" Grisham, has agreed to pay for a study under EPA supervision that would produce a plan for cleaning up the site.

EPA officials told the crowd of 50 at the Omaha School Cafeteria Monday night that Ormond was denying Mass Merchandisers and the EPA access to the site.

They said they expected to have access within four months and the study would then take 21 months.

After the study, a plan for cleaning up the site will be developed.

While the EPA is going through its long Superfund process, the state Pollution Control and Ecology Department has filed suit against Arkwood, Ormond, Grisham and Mass Merchandisers, asking for a state court order forcing them to clean up the site.

A state lawyer said last summer that Mass Merchandisers' agreement with the EPA only involved the

study, and the state wants a court order forcing all responsible parties to actually clean up the site.

Residents complained to the EPA officials Monday night about the minimum two-year wait before the clean-up begins.

Omaha Alderman John Parton said the city had already lost one in-

dustry. Asked after the meeting, he said the big Tyson Foods feed mill was planned for Omaha, but changed to Bergman after the pollution question was raised.

Mass Merchandisers is testing 10 wells, springs and run-off spots four times a year and Bob Barker, the

(See Omaha On Page 10)

2-3-87

PARTIAL TRANSCRIPT OF PUBLIC MEETING AT OMAHA SCHOOL
ON FEBRUARY 2, 1987, CONDUCTED BY EPA

CITIZEN: I'd like to ask Ellen a question there.

Where does Omaha stand in this ?

Are we in the NPL listing yet?

ELLEN: Yes, we are passed that.

CITIZEN: You mentioned something about 18 months, is
that what we are talking about?

ELLEN: The remedial investigation and feasibility study
will begin once we are able to secure access to
the site.

2-C
Home Owned
Independent
Evening
Newspaper

Harrison Daily Tin

110 years continuous service to North Arkansas

VOLUME 111 — NO. 157

© Times Publishing Company, Inc.

HARRISON, ARKANSAS — MAY 7, 1987

22 pages in 1

EPA Seeks Access To Arkwood Plant

FORT SMITH — The federal Environmental Protection Agency filed suit in federal court here last week against Haille C. Ormond and C. C. "Bud" Grisham of Harrison to obtain access to the Arkwood Superfund site at Ormond.

Ormond owns the land and Grisham is a former owner and operator of a wood treating operation there that used pentachlorophenol, which causes cancer and birth defects in test animals, and creosote, which the EPA says may cause "immunosuppression and disorders of the liver and kidneys."

The hazardous chemicals have spread off the Arkwood site, the lawsuit says.

Mass Merchandisers Inc., which leased the plant in 1974 and continued to operate it until 1984, has agreed to do preliminary clean-up studies but Ormond and Grisham have denied the company and the EPA access to the property to finish needed tests, the lawsuit says.

It says the EPA believes that Ormond and Grisham "have undertaken or are planning to undertake landscaping, which may include bulldozing, mixing soils and planting vegetation." That would interfere with inspection and sampling at the site and "may cause an imminent

and substantial endangerment to the public health," the lawsuit says.

Ormond and Grisham have not responded to the federal suit by the EPA, but they have responded to a chancery court motion that Mass Merchandisers filed in February in Harrison seeking the same access. That motion was filed by Harrison lawyer Bill Doshier in what began as a lawsuit by the state Pollution Control and Ecology Department against both Mass Merchandisers and Ormond and Grisham.

Ormond and Grisham replied in the local case that they were doing their own "investigation on the site" in an attempt to get it taken off the Superfund list and letting Mass Merchandisers on the site would "complicate and impede" Ormond and Grisham's investigation.

Further, they argued that Mass Merchandisers' proposed \$1.5 million study was "excessive and unduly expensive," which was a matter of concern to the two men since the company was trying in a counter-suit to make the two men pay for it. They also said the company was using the study to build up a case for making the two men rather than the company liable for the later costs of actually cleaning up the site.

U. S. DISTRICT COURT
WESTERN DIST. ARKANSAS
FILED

UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF ARKANSAS
APR 28 1987

UNITED STATES OF AMERICA,)
)
Plaintiff,)
)
v.)
)
HALLIE C. ORMOND and)
C.C. GRISHAM,)
)
Defendants.)

BEVERLY R. STITES; Clerk
By Deputy Clerk

CIVIL ACTION NO. 87-2075
3034

COMPLAINT

The United States of America on behalf of the
Administrator of the United States Environmental Protection
Agency ("EPA") alleges that:

PRELIMINARY STATEMENT

1. This is an action seeking an injunction under
Section 104(e)(5) of the Comprehensive Environmental Response,
Compensation, and Liability Act of 1980 (CERCLA), as amended
by the Superfund Amendments and Reauthorization Act of 1986
(SARA), Pub. L. No. 99-499, 100 Stat. 1613 (1986), in order to
gain access to a Superfund Site pursuant to Section 104(e)(3)
of CERCLA for the purposes of conducting a Remedial Investiga-
tion/Feasibility Study (RI/FS) to determine the amount and
extent of contamination of the site. The United States also
seeks an injunction under Sections 104(e)(5) and 106(a) of
CERCLA to enjoin the Defendants from undertaking landscaping
activities at the site which interfere with the EPA's inspection

COMMENTS OF
MASS MERCHANDISERS, INC.
REGARDING UPDATE NO. 4 TO THE
NATIONAL PRIORITIES LIST
ARKWOOD, INC. SITE (OMAHA, ARKANSAS)

I. INTRODUCTION

These comments are submitted on behalf of Mass Merchandisers, Inc. of Harrison, Arkansas ("MMI") in response to EPA's Update No. 4 to the National Priorities List. 50 Fed. Reg. 37950 (published September 18, 1985). MMI's comments are limited to the Hazardous Ranking System ("HRS") score proposed for the Arkwood, Inc. site in Omaha, Arkansas. As set forth more fully below, MMI believes that EPA's HRS calculations contain two errors that significantly affect the ultimate HRS score for the Arkwood site. First, EPA's estimate of the total quantity of waste erroneously counts the same waste more than once. Second, EPA's Groundwater Targets calculations are based on an erroneous assumption regarding the number of affected groundwater users and the availability of alternate, unthreatened supplies. When both of these errors are eliminated from the HRS calculations, the HRS score for the Arkwood site is reduced from 34.21 to 14.52.

II. BACKGROUND

The Arkwood site is the location of a small, single cylinder wood treating plant in north central Arkansas. The plant was constructed in 1962 and closed in 1984. MMI operated the plant from 1974 to 1984. In 1981, an off-site investigation revealed detectable levels of pen-

tachlorophenol in two springs and two inactive domestic wells in the immediate vicinity of the plant site. Since 1981, MMI has cooperated with the Arkansas Department of Pollution Control & Ecology ("ADPC&E") in voluntary efforts to investigate groundwater conditions and remove potential sources of contamination.

III. THE PROPOSED HRS WASTE QUANTITY CALCULATION

Update No. 4 to the NPL proposed an HRS score of 34.21 for the Arkwood site. This calculation was based, in part, on an estimated total quantity of waste of 6,234 tons. This estimated quantity of waste, in turn, is the total of three separate items:

1. Bob Barker, one of the Arkwood plant managers, estimated to ADPC&E inspectors in 1981 that the plant produced a total of 500 gallons of waste per year during his tenure. The HRS calculation in Update No. 4 multiplied this 500 gallon per year figure by the 22 years the plant was in operation, for a total of 11,000 gallons, or 220 fifty gallon drums, for a scoring equivalent of 55 tons.
2. A pit or ditch adjacent to the plant site, which contains sludge and soil contaminated with creosote and pentachlorophenol, was estimated to be 40 feet long, 15 feet wide, and 3 feet deep. These dimensions result in a total volume of .68 cubic yards, or a scoring equivalent of 68 tons.
3. A sawdust pile at the east end of the plant yard was estimated to be 275 feet long, 150 feet wide, and 4 feet deep. These dimensions result in a volume of 6,111 cubic yards, or a scoring equivalent of 6,111 tons.

MMI respectfully submits that these waste quantity calculations erroneously count the same wastes more than

once and, consequently, overstate the value used in the HRS scoring for total quantity of waste.

The first item in EPA's calculations represents an estimate of waste generated over the operating life of the plant. The second item, the railroad ditch, is one of the areas where these wastes were placed. Thus, all of the wastes placed in the railroad ditch are counted once as part of Item No. 1, and a second time as part of Item No. 2. MMI concedes that the total volume of the contaminated soil in the railroad ditch is undoubtedly larger than the volume of waste which is contaminating the soil. Under the Hazard Ranking System, however, it is inappropriate to base a score on the total volume of contaminated soil or other contaminated matrix at a site. Only the amount of the contaminating hazardous substance is to be included in the waste quantity calculation. Uncontrolled Hazardous Waste Site Ranking System Users Manual. 47 Fed. Reg. 31187, at 31229 (published July 16, 1982).

Item No. 3 in the calculation of total waste represents an even more significant error in the estimate of waste quantity. The pile of sawdust and shavings at the east end of the plant yard was generated by wood planing equipment used in the manufacture of ties and posts. The planing equipment was used exclusively on untreated wood. Consequently, the sawdust and shavings themselves originally

contained no treatment chemicals. Sampling evidence indicates, however, that the sawdust pile is now contaminated with pentachlorophenol in the low parts per million range.* The only possible source of the pentachlorophenol observed in the sawdust pile is MMI's use of the liquid wastes included in Item No. 1, above, for dust control purposes.

Consequently, as with the railroad ditch, all of the wastes in the sawdust pile are counted once by EPA as a part of Item No. 1, and once again as part of the sawdust pile. Furthermore, inclusion of the entire volume of the sawdust pile improperly adds to the waste calculations a substantial volume of soil and sawdust on top of the quantity of the wastes which have contaminated them.

If, for any reason, the sawdust pile is included in the calculation of hazardous waste, MMI also wishes to note that the dimensions attributed to the sawdust pile by EPA overstate its volume by more than two orders of magnitude. In order to establish more accurate dimensions, MMI photographed and surveyed the sawdust pile as it now exists. The photograph of the sawdust pile is reproduced as Appendix A of these Comments. A drawing with surface and depth measurements is reproduced as Appendix B. MMI's measurements indicate that the sawdust pile has a surface area of

*The Documentation Record for EPA's HRS scoring indicates that the sawdust pile was included in the calculation of waste quantity because two 1979 soil and sawdust samples taken by the ADPC&E showed pentachlorophenol contamination

2108 square feet and an average depth of six to nine inches. These dimensions result in a total volume of less than 60 cubic yards.

EPA's estimate of 6,111 cubic yards for the volume of the sawdust pile was based upon an April 1985 memorandum from Doice Hughes, a geologist with ADPC&E, to Tim Perdue in the Region VI Office. MMI discussed its photograph and survey with Mr. Hughes as part of its preparation of these Comments. Mr. Hughes indicated that the dimensions he originally reported to EPA were only an estimate, and that a subsequent visit to the site convinced him that his estimate significantly overstated the size of the sawdust pile. Mr. Hughes indicated that he did not question the accuracy of MMI's measurements.

In discussing the sawdust pile, MMI wishes to stress that there has been no alteration of the sawdust pile or removal of materials since the ranking process was initiated. The plant site is fenced in, with a locked gate.

at levels of 30,000 and 23,000 parts per million. MMI questions the levels of pentachlorophenol reported for these samples and recently took three samples from three different portions of the sawdust pile for independent verification. The samples taken by MMI were analyzed by the McKesson Environmental Services Laboratory in Dublin, California. The analytical results showed pentachlorophenol at 0.5 ppm, 2.1 ppm, and 170 ppm. Splits of each sample were retained and will be made available to EPA if it wishes independent confirmation of the analyses.

To the best of MMI's knowledge, no sawdust or shavings have been added to or removed from the sawdust pile since the termination of treatment operations in 1984.

Based upon the foregoing facts, MMI believes that Item No. 2, the railroad ditch, and Item No. 3, the sawdust that is assigned an HRS scoring value of 2. 47 Fed. Reg. 31187, at 31229 (published July 16, 1982). When this new scoring value is substituted for the original waste quantity value, the final HRS score for the Arkwood site is reduced from 34.21 to a corrected score of 26.32. An itemized comparison of the original HRS calculation and the revised calculation for the Arkwood site is attached as Appendix C of these Comments.

IV. AFFECTED GROUNDWATER USE

EPA's HRS scoring sheets and Documentation Record assigned a Groundwater Targets value of 29 for the Arkwood site. This Groundwater Targets value was based, in part, on the assumption that there are "no significant aquatards" separating the shallow groundwater system in the immediate vicinity of the plant, which has shown trace contamination off-site, and the deep aquifer that supplies the Omaha municipal water system and other groundwater users within a three mile radius of the plant. MMI believes that EPA's assumption is mistaken and that there is a substantial

barrier between the shallow groundwater system affected by the plant site, and the deep aquifer supplying the Omaha municipal water system and other groundwater users in the area.

As part of its voluntary effort to deal with conditions at the site, MMI has retained Geraghty & Miller to conduct a geohydrologic investigation of the Arkwood site and the surrounding area. Although substantial additional work remains to be done by Geraghty & Miller, their initial site assessment and monitoring data indicate that the contaminants have been found to reside only in the shallow (less than fifty feet below land surface) interconnected solution cavities found at the base of the limestone formation. Water that enters the shallow drainage system flows laterally westward through the shallow solution features, emerging as springs along Cricket Creek about 400 yards from the Arkwood plant site. Most of the domestic wells within about a mile of the plant have been tested; only three wells located in a very small area between the plant and the spring contain the contaminants. It is believed that the contaminants enter the wells via the shallow solution channels because the wells are cased only into the top of the limestone (and not to the depth of the solution channels), and a 300-foot thick confining bed exists below the shallow water-bearing zone.

It is Geraghty & Miller's belief that the 2100-foot Omaha municipal water well is not in any way threatened by waste from the Arkwood site. Several hydro-geologic reasons support this conclusion:

1. The hydraulic gradient at Arkwood has been determined to be northwestward (the Omaha well is located to the northeast);
2. The distance between the Arkwood site and the Omaha well is about one mile;
3. Several domestic water wells are located between the Arkwood site and the Omaha well that have not been found to be contaminated and, if designated as such, can act as an early warning system;
4. Several thick aquicludes exist between the shallow zone in which contamination has been observed and the aquifer that is tapped by the Omaha well;
5. A properly cased 900-foot well that is located on the Arkwood plant site itself has been sampled repeatedly and is free of any contamination.

Based upon the data generated thus far by Geraghty & Miller, MMI believes that two corrections should be made in the Groundwater Targets value for the Arkwood site. First, the Groundwater Use factor should be reduced from 3 to 2, because users of domestic wells in the vicinity of the plant have a municipal water supply available nearby which draws from an alternate, unthreatened source. Second, the population served by domestic wells in the immediate vicinity of the plant which could be affected by contamination in the shallow groundwater system totals less than ten

houses or a scoring equivalent of 38 people. This population falls in the 1 to 100 population range that is assigned a scoring value of 1. Use of this revised population value, together with the revised Groundwater Use factor, lowers the Groundwater Targets score from 29 to 16. The revision of the Groundwater Targets value, in turn, lowers the overall HRS score for the Arkwood site from 34.21 originally proposed by EPA to a corrected score of 18.87.

When the corrections suggested by these comments for total quantity of waste and Groundwater Targets are both included in the calculation, the final HRS score for the Arkwood site is reduced from 34.21 to a corrected score of 14.52. An itemized comparison of the original and revised HRS calculations is attached in Appendix C of these Comments.

VI. STATUS OF RESPONSE ACTIVITY

MMI recognizes that it is EPA policy not to consider the status of previous response or clean-up actions when scoring a potential NPL site. See 47 Fed. Reg. 31187 (July 16, 1982); 48 Fed. Reg. 40664 (September 8, 1983). Nevertheless, MMI believes that the current status of site investigation and remedial activity is relevant in considering the relative priority or need for Superfund attention at a given site.

The Arkwood site is not an orphaned or abandoned site. The owner and prior operators of the Arkwood site are known, and their financial resources are unquestionably adequate to address any foreseeable remedial contingency. More importantly, one of the responsible parties, MMI, has been cooperating with state officials for several years in remedial investigation and response activity. Finally, as noted by EPA in the Arkwood summary, a consent order addressing the site is nearing completion and should soon be entered.

Against this background, there is little reason to doubt that prompt and thorough investigation and remediation will take place at the Arkwood site without Superfund involvement.


VI. CONCLUSION

For the reasons set forth above, MMI respectfully submits that the HRS score proposed for the Arkwood site was based on an overestimate of the total quantity of waste and an erroneous assumption regarding the use of affected groundwater. As reflected in Appendix C, correction of either error significantly reduces the overall HRS score for the Arkwood site. When both errors are corrected, the revised HRS calculations reduce the overall score for the Arkwood site from 34.21 to a corrected score of 14.52.

MMI remains ready and willing to cooperate with EPA in any way it can in further consideration of the HRS scoring of the Arkwood site.

Respectfully submitted,

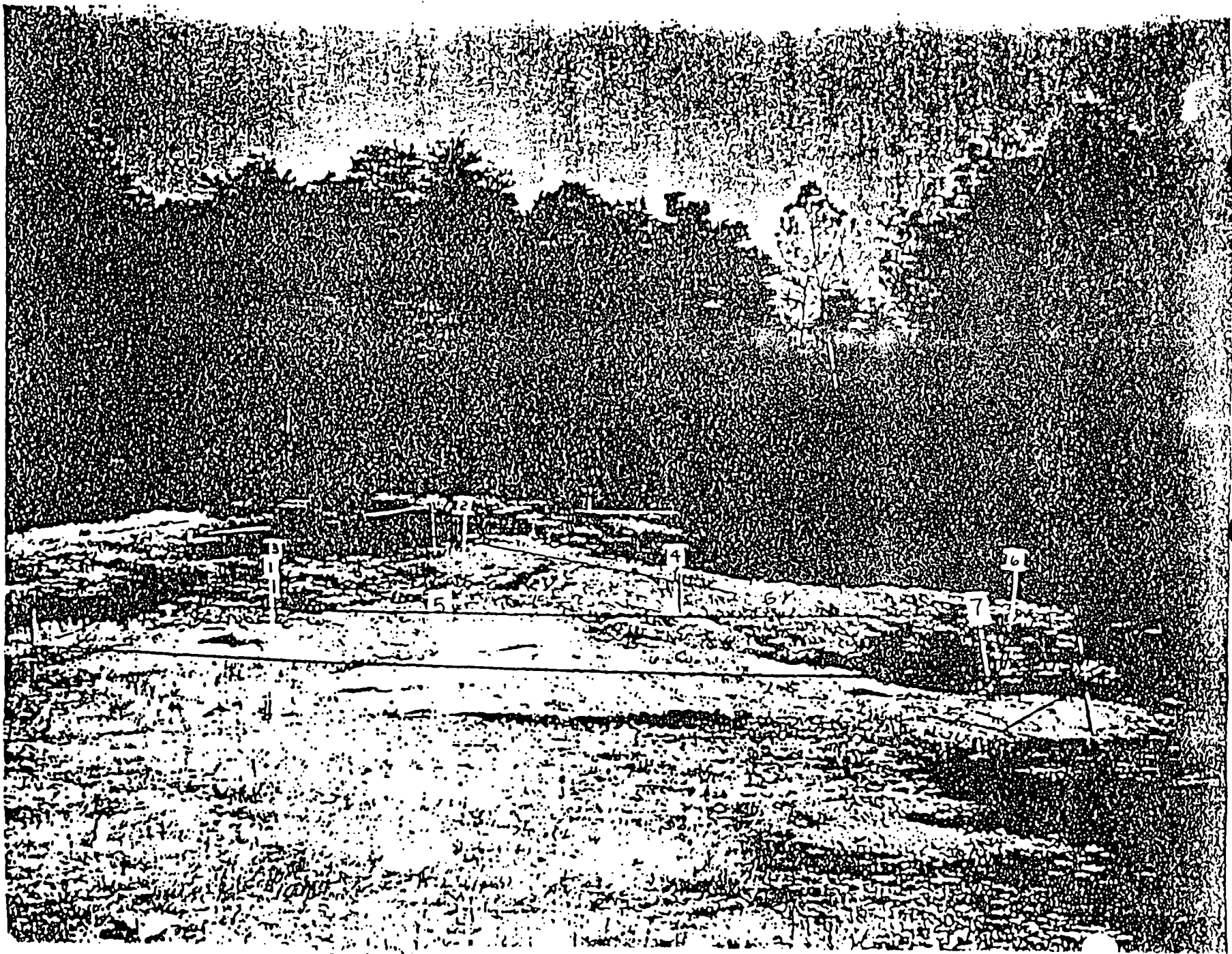
MITCHELL, WILLIAMS, SELIG,
JACKSON & TUCKER

By 
Allan Gates

Attorneys for
Mass Merchandisers, Inc.

APPENDIX A

PHOTOGRAPH OF "SAWDUST PILE"
(EAST END ARKWOOD PLANT YARD)





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VI

APR 06 1987

Honorable Dale Bumpers
United States Senator
2527 Federal Building
Little Rock, Arkansas 72201

Dear Senator Bumpers:

Thank you for your letter of March 26, 1987, on behalf of your constituent, Mr. Bill Doshier. Mr. Doshier is concerned about the basis for the nomination of the Arkwood, Inc., site to the National Priorities List (NPL). I have reviewed this matter and am pleased to offer the following information.

The Arkwood site was the location of a pentachlorophenol (PCP) and creosote wood-treating operation from about 1962 to 1984. During the facility's approximately 20 years of operation, PCP and creosote wastes were disposed of by dumping them directly onto the land's surface, and into the subsurface, via an on-site sinkhole. Chemical analyses of sinkhole fluids as well as soils in former waste disposal areas indicate moderate to high levels of numerous hazardous chemicals. These contaminants include a group of hazardous compounds known as polynuclear aromatic hydrocarbons, volatile organic priority pollutants such as benzene and toluene, PCP and polychlorinated dibenzodioxins ("Dioxin") and dibenzofurans.

In addition to on-site contamination, pollutants commonly found in creosote and PCP wastes have also been identified approximately 2,000 feet northwest of the site, in Cricket Spring. Groundwater sampling of local wells conducted by Mass Merchandisers, Inc. (MMI), one of the former site operators, indicates that several of these wells may also be contaminated. The primary goal of the ongoing remedial investigation is to determine the extent of contamination in groundwater as well as in surface water and soils.

The site was nominated for inclusion on the NPL on September 15, 1986. This nomination was based on the site's Hazard Ranking System (HRS) score. The HRS evaluates the quantity and toxicity of wastes at a site as well as the vulnerability of local populations and the environment to these wastes. The system is used nationwide to determine which abandoned hazardous waste disposal sites warrant nomination to the NPL. All sites achieving a HRS score of 28.5 or greater are nominated. The Arkwood, Inc., site received a HRS score of 34.21. 11

After nomination of a site is published in the Federal Register, there is a 60 day public comment period. EPA received comments from MMI and has re-evaluated the site in light of these comments. The sawdust pile, which Mr. Doshier has expressed concern over, was not considered to be contributing to the waste volume in the re-ranking of the site. However, after considering all public comments, the site still achieved a HRS score which warranted its nomination to the NPL.

The site is expected to be promulgated to the NPL in June 1987. Notice of the promulgation will be published in the Federal Register. At that time, the Agency's response to all comments received during the public comment period will be made available to the public.

Mr. Doshier also expressed concern over the high costs which are expected to be necessary to investigate and eventually remediate the site. These costs may be explained by the extremely complex hydrogeologic conditions at the site and the large number of highly toxic and persistent chemicals (e.g., dibenzodioxins) which must be addressed both on and off the site. In order to fully protect human health and the environment, a detailed two year study will be necessary to thoroughly characterize the extent of contamination at the site and to evaluate remedial alternatives.

I hope this information will be helpful in replying to your constituent. If I can be of further assistance, please contact me.

Sincerely yours,

Original Signed By:

Robert E. Layton Jr., P.E.
Regional Administrator



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VI

April 30, 1987

Mr. C.C. Grisham
c/o Mr. Bill Doshier
P.O. Box 1797
Harrison, AR 72601

Re: Request for Information concerning Arkwood, Inc.
Freedom of Information Number RIN-454-87

Dear Mr. Grisham:

Enclosed please find a copy of the Hazard Ranking System (HRS) package for the Arkwood site. We are unable to provide you with the "reevaluation package" which you have requested because we are not in possession of such a document. However, EPA's response to comments received on the original HRS package will include a recalculation of those sections of the package which are affected by the Agency's response. 4/19/85

The response to comments is currently being finalized in EPA Headquarters and will be published in the Federal Register when the site is promulgated, or listed final, on the National Priorities List. The site is expected to be promulgated in May or June of this year.

If you have any questions concerning this matter, please contact me at (214) 655-6735.

Sincerely yours,

Ruth L. Izraeli

Ruth L. Izraeli
Regional Project Manager

Enclosure

I 50 PAGE PACKAGE ATTACHED.

JOHN PAUL HAMMERSCHMIDT
THIRD DISTRICT, ARKANSAS

HOME ADDRESS:
HARRISON, ARKANSAS

WASHINGTON ADDRESS:
2207 RAYBURN BUILDING
WASHINGTON, DC 20515
PHONE: 225-4301

202-

Congress of the United States
House of Representatives
Washington, DC 20515

COMMITTEES:
PUBLIC WORKS AND
TRANSPORTATION
SUBCOMMITTEES:
AVIATION—RANKING MEMBER
WATER RESOURCES
SURFACE TRANSPORTATION
VETERANS' AFFAIRS—
RANKING MEMBER
SUBCOMMITTEES:
HOSPITALS AND HEALTH CARE—
RANKING MEMBER
COMPENSATION, PENSION AND
INSURANCE
HOUSING AND MEMORIAL AFFAIRS
SELECT COMMITTEE ON AGING
SUBCOMMITTEE:
HOUSING AND CONSUMER
INTERESTS—RANKING MEMBER

June 2, 1987

Bud Grisham
Highway 43 West Harrison
Harrison, Arkansas 72601

Dear Bud,

Thanks for being in touch to let me know of your interest in obtaining the "Modified H.R.S. Ranking Package for the Arkwood Site, Omaha/Arkansas." I regret the delay in getting back to you, the requested information only recently arrived in my office.

I trust this is the information you wanted. If there is any further way in which I might be helpful, please let me know.

With kind regards,

Sincerely,

John Paul
JOHN PAUL HAMMERSCHMIDT
Member of Congress

JPH/rsb
Enclosure
RAY REED

CCG + RAY REED 6/9/87 . RR SAID THEY DEAL AT A HIGH
LEVEL OF THE EPA + SENDING US THE WRONG PCK.
WAS "HUMAN ERROR" ON EPA - NOT STONEWALLING,
AND HE WOULD HAVE THE "REVISED" OR "MODIFIED"
PACKAGE IN THE MAIL SOON AND THAT HE WILL
GET ON THE LINE TODAY TO EPA.

Reed 10/9/87 - 2^{PM}

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

IN THE CHANCERY COURT OF BOONE COUNTY, ARKANSAS

ARKANSAS DEPARTMENT OF POLLUTION
CONTROL AND ECOLOGY

PETITIONER

vs. NO. E-86-293

HALLIE C. ORMOND. ARKWOOD. INC..
MOUNTAIN ENTERPRISES. INC..
C. C. GRISHAM. MARY JO GRISHAM
and MASS MERCHANDISERS. INC.

RESPONDENTS

HALLIE C. ORMOND

THIRD-PARTY PLAINTIFF

vs.

McKESSON CORPORATION

THIRD-PARTY DEFENDANT

Excerpt from the testimony of Mr. Douglas Deal, taken in a hearing
before the Honorable Roger V. Logan, Jr., Chancery Judge, in the
above captioned case, on the 1st day of June, 1987.

1 DURING CROSS EXAMINATION OF MR. DEAL

2 BY MR. ADAMS:

3 Q It is certainly possible that just because EPA proposes a site as
4 being a superfund site, you can have it removed from that list before
5 it becomes official; isn't that true?

6 A I think to date there have been seven sites which were dropped from
7 the proposed list. I could be wrong in that number but that's out of
8 a total of 960 some that have been proposed or finalized. It's very rare
9 for a site that's been proposed for the NPL not to become a final -- be
10 on the final list.

11 Q Still, out of necessity and reviewing this work plan, you have had
12 to review the findings that EPA relies upon in proposing that this is
13 a superfund site. Do you have an opinion as to whether or not this site
14 in fact qualifies or meets the criteria for a superfund site?

15 A I believe that the comments which MMI submitted during comment period,
16 particularly relative to the estimate of the final waste of the site,
17 I believe those comments are very accurate and I believe that the site
18 should not be listed on the final NPL. On the other hand, I have felt
19 that way about other sites which are listed today.

20 Q It is your understanding, I take it, that it is at this point a pro-
21 posed superfund site?

22 A Yes.

23 Q The decision of officially designating it as a superfund site has
24 not been made at this time?

25 A That's correct.

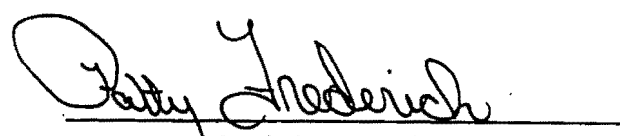
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

C E R T I F I C A T E

I, Patty Frederick, official court reporter within and for the Fourteenth
Judicial District of Arkansas, do hereby certify that I duly reported
the cause of action so styled in the Caption. I further certify that
I prepared the foregoing excerpt from the testimony of Mr. Douglas Deal.

WITNESS MY HAND AND SEAL

this 7th day of June, 1987.



Patty Frederick, ACR #192

STATUS OF THE SITE

Introduction

The following paragraphs describe the procedures and comparisons utilized by CAI when evaluating and ranking the Site. The Site was a small, single cylinder operation, about 1% the size of the American Creosote Works, a Superfund site in Pensacola Florida, which operated for 80 years before being abandoned. The Site operation was also much smaller than the Koppers plant in Texarkana. A residential community, Carver Terrace, is built on top of the abandoned Koppers site. The Koppers site is not considered by EPA to be an imminent hazard. The Site, even at its peak in 1981, was never considered an emergency by ADPC&E, but a condition which could pose long-range risks to the environment and people living nearby if actions were not taken to curtail PCP and creosote migration off-Site. The Site has not, does not and will not present an imminent and substantial risk to man or the environment. The environmental status of the Site has been steadily improving since production ceased in 1984. The plant was dismantled in 1986 and surface waste disposal sites stabilized in 1987. The Site does require additional remedial actions to be taken if migration of PCP in groundwater is to be curtailed in the near future, however no irreparable harm will during the orderly development of a RI/FS Plan by CAI. CAI believes that the GMI RI/FS posed significant risk to man and the environment if implemented. CAI believes that the GMI plan should be stayed pending a careful analysis and justification of the need to penetrate the Site aquitard.

Preliminary Assessments

The first step in CAI's evaluation of the Site was to obtain and review available reports, documentation and regulatory actions. Very useful "preliminary assessments" had been conducted by ADPC&E and contractors of MMI such as MCE and GMI. The lead environmental agency was the ADPC&E until 1985. The US EPA assumed the lead when the Site was proposed for listing on the NPL.

Site Inspections

Various Site inspection and evaluation teams, including CAI, have compiled voluminous documentation describing the Site. Work plans have been prepared. Groundwater, soil, surface water, stream sediment and sludge from lagoons have been sampled and analyzed for their contents. The average inspection required taking ten to twelve samples for analysis. Hundreds of analytical chemistry procedures have been performed. In addition to sampling, inspections included a reconnaissance of the Site's layout and terrain in order to document all buildings or structures, access roads, the location of nearby residences. Finally, surveys of vicinity wells and springs have been performed.

The preliminary assessments by ADPC&E indicated a release of PCP and possible components of creosote from the Site. These releases were considered to have the potential to threaten human health or the environment. The State agreed to accept a remedial action plan prepared by MCE for MMI prior to EPA taking the lead.

Cranmer and Associates, Inc.

The remedial action taken by MMI and landowners have for the most part exceeded those actions previously acceptable to ADPC&E.

The purpose of the EPA Site inspection was to examine the Site first-hand and supposedly learn enough to guide the ranking of the Site for possible placement of the National Priorities List (NPL). Although these regulatory actions were major efforts they were not expected to, and indeed did, not provide all the information required for formulation of a remedial action plan acceptable to EPA.

The results of several inspections and studies by contractors have been provided to EPA. Nevertheless EPA has demonstrated a continued determination to place the Site on the NPL. Placement on the NPL is of great significance because NPL sites are eligible for long-term remedial response actions using Superfund money and EPA's authorities are enhanced. In order to rank the sites and set priorities, EPA and the State use a special scoring system called the Hazardous Ranking System (HRS). If used properly, the HRS takes into consideration the types and quantities of wastes at the Site, the extent of contamination that has already occurred, especially of ground water, and the numbers of people living or working near the Site who could be exposed to migrating hazardous chemicals escaping from the Site. There were significant errors made by EPA in the HRS ranking of the Site. These errors will now be discussed in detail.

Waste Quantity Calculation

The quantity of PCP and creosote remaining at the Site has been controversial and has been recalculated by various parties. EPA estimated a total quantity of waste at the Site to be 6,234 tons. EPA grossly overestimated the quantity present. The quantity cited by EPA was calculated erroneously as follows. Mr. Bob Barker of MMI provided estimates of product loss to ADPC&E representatives in 1981. Mr. Barker stated that the plant produced a total of 500 gallons of waste per year. EPA multiplied this 500 gallon per year figure by the 22 years that the plant was in operation, for a total of 11,000 gallons. EPA then added to this total the same waste located in the Railroad Ditch Pit and Sawdust Pile. The Railroad Ditch Pit contains sludge and soil contaminated with creosote and pentachlorophenol. The volume of the Railroad Ditch Pit was estimated by EPA to be 67 cubic yards (40 feet long, 15 feet wide, and 3 feet deep). The Sawdust Pile at the east end of the Site was estimated to be 6,111 cubic yards (275 feet long, 150 feet wide and 4 feet deep).

MMI, via its attorney Alan Gates, was the first party to take formal issue with EPA's calculations. Mr. Gates correctly responded during the EPA-NPL comment period that the waste quantity calculations for the Site improperly recorded wastes more than once and consequently overstated the total quantity of waste at the Site. CAI has confirmed Mr. Gates points and expanded the evaluation quantitatively.

Cranmer and Associates, Inc.

CAI has estimated the quantities of waste released at the Site. Several assumptions were made prior to initiation of calculations.

1. No PCP was used until 1968. Creosote was used exclusively from 1965 to 1968.
2. After 1968, the average split between PCP and creosote was 50%.
3. Sales for 1984 were estimated for 6 months of operation.
4. Sale dollars are related to production volume after adjustments for inflation which was estimated at 5% per year.
5. The creosote:oil mix ratio was 1:1.
6. The PCP:oil mix ratio was 1:19.
7. 500 gallons of waste was released in 1981.
8. 60% of the posts were treated in 1965 increasing to 90% in 1981.
9. Changes in operations occurred in 1982 which resulted in only 100 gallons being lost.

The following table provides the details of the CAI calculations. It has been estimated that approximately 1,771 gallons of creosote and 150 gallons of PCP were released on the Site over a 20 year period. A considerable portion of this material has been lost from the Site by the processes of rainwater scouring, on-Site burning and spontaneous volatilization.

Cranmer and Associates, Inc.

Year	Value of 1984 Dollar* (\$)	Adjusted Sales	% Treated†††		Creosote Waste (gallons)	PCP Waste (gallons)	Total (gallons)
			Creosote	PCP			
1965	0.38	384,210	60	—	72	—	72
1966	0.40	1,030,000	62	—	250	—	250
1967	0.42	1,400,000	64	—	260	—	260
1968	0.44	1,104,545	33	33	100	100	200
1969	0.46	1,215,217	34	34	110	110	210
1970	0.49	1,440,816	35	35	120	120	240
1971	0.51	1,717,647	36	36	140	140	280
1972	0.54	2,103,704	37	37	180	180	360
1973	0.57	3,378,947	38	38	280	280	560
1974	0.60	4,890,000	39	39	360	360	720
1975	0.63	2,371,428	40	40	180	180	360
1976	0.67	3,088,059	41	41	220	220	440
1977	0.70	2,714,285	42	42	180	180	360
1978	0.84	3,513,513	43	43	260	260	520
1979	0.77	3,506,493	44	44	240	240	480
1980	0.81	3,456,790	45	45	200	200	400
1981	0.86	3,516,279**	45	45	220	220	440
1982	0.90	2,368,888	45	45	140	140	280
1983	0.95	1,578,947***	45*	45*	20	20	40
1984	1.00	750,000***	45*	45*	10	10	20
Total					3,542 <u>x 0.5†</u>	2,960 <u>x 0.05††</u>	
Amount of Pure Chemical (gallons)					1,770	150	1,920

* Assume 5% inflation rate as average between 1965 - 1985.

** Loss estimated as 500 gallons.

*** Loss reduced by 80% due to operational charges.

† Mix was 50% creosote:50% oil.

†† Mix was 5% PCP:95% oil.

††† Assume 60% treated in 1965 increasing to 90% treated in 1981, steady thereafter.

• Change in operating procedure effects 80% reduction in waste loss.

The majority of surface pollution at the Site was due to product loss due to excess treatment chemicals dripping from stored posts and convenience spraying in the storage yard. The vast majority of this material was lost continuously from the Site over the years with little chance of concentrating in the environment.

Waste confined in Sinkholes and Pits has been concentrated and protected from rain water runoff. Areas of concentrated waste remain at the Site. The wastes in these areas is contained, concentrated and a large portion can be effectively and efficiently removed and properly disposed of.

Minor dispersed micropockets exist in the microcavems underlying the Site. Some connections between channels are possible, even likely, but the dispersed micropockets are not practical targets for remedial action and do not represent imminent and substantial hazards to man or the environment.

Cranmer and Associates, Inc.

PCP levels as high as 1.6% have been reported in the Sinkhole. The volume has been reported to be 4 cubic yards. Therefore, 12 gallons of PCP may be in the Sinkhole. The railroad Ditch Pit area has had quantities between 1 and 5% PCP reported on the near surfaces. If one assumes that the volume is 68 cubic yards, then up to a maximum of gallons of PCP may be present with a best estimate of less than 125 gallons.

There could be up to 10 gallons of PCP in the Ash Pile.

If we assume that a 10,000 square feet area around the Trolley/Treatment Cylinder Area is contaminated to a depth of 3 feet at an average of 100 ppm, a total of 40 gallons of PCP could be recovered.

Previous calculations have relied on Mr. Barker's estimate that 500 gallons of wood treating chemicals, including oil, being lost in 1981. If PCP were used for 16 years (1968-1984) and if 5% PCP solutions represented 50% of sales, then 150 gallons of PCP would have been released at the Site. This is in reasonable agreement with the estimates based on analytical chemistry data.

Estimates of PCP by Analytical Chemistry

By Bob Barker

Sinkhole	12 gallons	
Railroad Ditch Pit	125 gallons	
Ash Pile	10 gallons	
Trolley/Treatment Area	<u>40 gallons</u>	
Total	187 gallons	150 gallons

CAI was unable to confirm that the expected large quantities of creosote remain on the Site. A partial explanation is that creosote burns more readily than PCP. Major creosote components are more soluble in water than PCP. Finally, major creosote components are lighter than water while PCP is twice as dense and sinks.

EPA has not been unaware of their HRS scoring errors. Important points relative to the quantity of waste at the Site were made in comments from Alan Gates, attorney for MMI, to EPA. Mr. Gates pointed out that the first item in EPA's calculations represented an estimate of waste generated over the operating life of the plant. The railroad ditch is one of the areas where EPA double counted. All of the wastes placed in the railroad ditch had already been counted once as part of the total waste released. It was inappropriate to count the wastes a second time. The total volume of the contaminated soil in the railroad ditch is undoubtedly larger than the volume of waste which is contaminating the soil. Mr. Gates' point was that it is inappropriate to add soil or other matrices at a Site to the amount of chemical waste present. Only the amount of the contaminating hazardous substance is to be included in the waste quantity calculation according to the Uncontrolled Hazardous Waste Site Ranking Users Manual. 47 Federal Register 31187, at 31229 (published July 16, 1982). CAI followed upon Alan Gates' point and calculated the PCP in the Railroad Ditch Pit to be 1.5 cubic yards.

Cranmer and Associates, Inc.

Calculation of total waste in the Sawdust Pile represented another significant error in the EPA estimate of waste quantity. The pile of sawdust and shavings at the east end of the Site had been generated by wood planing equipment and had been used exclusively on untreated wood. The sawdust and shavings themselves originally contained no treatment chemicals. Evidence obtained by MMI indicated, however, that the Sawdust Pile, in 1986, was contaminated with pentachlorophenol in the low parts per million range.* The most reasonable source of the pentachlorophenol observed in the Sawdust Pile was derived from Bob Barker's statement that MMI's used the liquid wastes for dust control purposes.

The wastes in the Sawdust Pile, just as in the case of the Railroad Ditch Pit, were counted twice by EPA. Inclusion of the entire volume of the Sawdust Pile improperly added a substantial volume of soil and sawdust. Mr. Alan Gates also noted that the dimensions attributed to the Sawdust Pile by EPA overstated its volume by more than two orders of magnitude. MMI photographed and surveyed the Sawdust Pile. MMI's measurements indicated that the Sawdust Pile had a surface area of 2,108 square feet and an average depth of six to nine inches. These dimensions resulted in a total volume of less than 60 cubic yards. CAI estimated that in May 1987, the volume of the Sawdust Pile was less than 40 cubic yards.

Why was there such a large discrepancy for the Sawdust Pile? EPA's estimate of 6,111 cubic yards for the volume of the sawdust pile had been based upon an April 1985 memorandum from Doice Hughes, a geologist with ADPC&E, to Tim Perdue in the EPA Region VI Office. According to Mr. Gates, MMI discussed its photograph and survey with Mr. Hughes. Mr. Hughes indicated that the dimensions he originally reported to EPA were only an estimate and later indicated that he did not question the accuracy of MMI's measurements. CAI estimated that less than one pound of PCP exists in the Sawdust Pile. EPA has been inconsistent in its treatment of the Sawdust Pile at the Site as a hazardous waste. For example, EPA, in PD-4 suggested that discarded PCP-treated wood could be buried or burned in incinerators.

The obvious exaggeration by EPA of quantities of PCP and creosote present at the Site makes the situation appear far worse than it is. It is the opinion of CAI that the Site should not be included on the NPL. The Site's HRS score, when calculated correctly, clearly does not justify NPL inclusion.

EPA further exaggerated the Site's status with erroneous HRS groundwater scores. EPA's HRS Groundwater Targets value was based, in part, on the assumption that there were "no significant aquitards" separating the shallow groundwater system in the immediate vicinity of the Site (which has shown trace contamination by PCP and possibly creosote), and the deep aquifer that supplies the Omaha municipal water system and other groundwater users within a three mile radius.

*The documentation Record of EPA's HRS scoring indicates that the sawdust pile was included in the calculation of waste quantity because two 1979 soil and sawdust samples taken by the ADPC & E showed pentachlorophenol contamination at levels of 30,000 and 23,000 ppm. MMI questioned the levels of pentachlorophenol reported in these samples and they took three samples from three different portions of the sawdust pile for independent verification. The samples taken by MMI were analyzed by the McKesson Environmental Services Laboratory in Dublin, CA. The analytical results showed pentachlorophenol at 0.5 ppm, 2.1 ppm, and 170 ppm.

Cranmer and Associates, Inc.

Considerable data exists which contradicts EPA's opinion and alleviates CAI's initial concern. MMI retained Geraghty & Miller to conduct a geohydrologic investigation of the Site and the surrounding area. Geraghty & Miller, in their initial Site assessment and monitoring data indicated that contaminants had been found to reside only in the shallow (less than 50 feet below land surface) interconnected solution cavities found at the base of the limestone formation. Water that entered the shallow drainage system flowed laterally westward through the shallow solution features, emerging as a spring along Cricket Creek about 400 yards from the Site. Most of the domestic wells within about a mile of the Site had been tested; only three wells located in a very small area between the Site and spring contained the contaminants. It was believed that the contaminants entered the wells via the shallow solution channels because the wells were cased only into the top of the limestone (and not to the depth of the solution channels), and a 300-foot thick confining bed existed below the shallow water-bearing zone.

It was GMI's belief, and CAI concurs, that the 2100-foot Omaha municipal water well is not in any way threatened by waste from the Site. Several hydrogeologic reasons supported this conclusion:

1. The hydraulic gradient at the Site has been determined to be northwestward (the Omaha well was located to the northeast);
2. The distance between the Site and the Omaha well is about one mile;
3. Several domestic water wells are located between the Site and the Omaha well that have not been found to be contaminated and, if designated as such, could act as an early warning system;
4. Several thick aquicludes existed between the shallow zone in which contamination has been observed and the aquifer that was tapped by the Omaha well; and
5. A properly cased 900-foot well that was located on the Site itself had been sampled repeatedly and was free of any contamination.

Cranmer and Associates, Inc.

Water Well Inventory and Construction Details of Wells
Within Three Mile Radius of the Site.

Well Owner	Use of Well	Date Well Completed	Depth Interval of Water Producing Formation (ft)	Type of Formation	Depth to Water (ft-bls)	Total Depth of Well (ft-bls)
Omaha City Well*	Municipal			Dolomite		2100
John Atchison	Domestic	09-08-80	780-785	Limestone	400	795
Frank Atchison	Domestic	09-08-78	525-530	Limestone	380	550
Robert Behrens	Domestic	07-17-82	274-274.5	Limestone	240	565
Robert Behrens	Domestic	01-26-80	280-300	Limestone	350	400
Robert Behrens - abandoned	Domestic	01-26-80	280-300	Limestone	350	496
Dean Curhow	Domestic	10-20-78	664-670	Limestone	410	775
Mildred Davidson	Domestic	10-20-78	660-665	Limestone	-	687
Bud Essary	Domestic	07-15-76	210-215	Limestone	160	300
Bud Essary	Domestic	07-20-81	640-650	Limestone	300	688
Clifford Ford	Domestic	10-02-75	384-385	Limestone	250	415
Clinton Hicks	Domestic	09-18-72	470-480	Limestone	360	650
John Huston	Domestic	12-10-79	441-445	Limestone	350	498
Fernam Jones	Domestic	03-15-79	520-530	Limestone	450	550
Norman Kiasener	Domestic	10-30-77	450-470	Sandstone	375	505
James Lovell	Domestic	11-20-74	400-440	Limestone	300	480
Leonard Matlock	Domestic	08-20-76	645-690	Sandstone	430	705
McGinnis	Domestic	07-29-75	593-594	Limestone	400	610
Charles McMahon, Jr.	Domestic	06-15-77	348-352	Limestone	-	412
Don Moore	Domestic	07-28-75	519.5-520	Limestone	350	550
New Hope Baptist Church	Domestic	05-17-71	190-195	Sandstone	330	555
Nelson Rice	Domestic	09-74	-	-	-	783
Sid Richardson	Domestic	01-08-77	770-772	Limestone	375	775
John Robinson*	Domestic	07-15-73	600-610	Limestone	480	640
T.C. Sallee	Domestic	08-01-73	580-690	Limestone	430	710
Cam Tong	Domestic	05-17-71	725-730	Limestone	380	735
John Wood, Sr.	Domestic	02-23-73	145-253	Limestone	-	253
Nelson Rice	Domestic	09-74	-	-	-	783
Omaha School Well	Domestic	-	-	-	-	-
Cathy Duggan	Domestic	-	-	-	-	-
Bnam	Domestic	-	-	-	-	-
Birmingham	Domestic	-	-	-	-	-
Birmingham - abandoned	Domestic	-	-	-	-	-
David Miles	Domestic	-	-	-	-	-
O.C. White	Domestic	-	-	-	-	-
O.C. White	Domestic	-	-	-	-	-
Tate	Domestic	-	-	-	-	-
Site*	Industrial	-	-	-	-	-
House w/ Satellite Dish	Domestic	-	-	-	-	-
Turney	Domestic	-	-	-	-	-

*The Omaha City water supply is located within one mile of the Site. The total depth of the well is 1315' with a casing depth of 60'. The only water well sample taken was from the Site. The depth of the well is unknown, however, the pump (submergible) was set at 920'.

Cranmer and Associates, Inc.

PENTACHLOROPHENOL ANALYSIS
OF GROUND AND SURFACE WATER

Date	Cricket Spring	Behren Cistern	Behren Well	RR Spring South	Canning Fact. Spring	Miles Well	Birmingham Old Well	Birmingham New Well	Binam Well	RR Culvert Sludge	RR Ditch Runoff	Site Run-off
1982												
04-14	8.3	5.6		5.6	0.005				ND	0.005		
06-29	2.7	0.48		0.004					0.004			
07-26	0.013		0.0003	0.0002					0.0001		0.24	
08-23												0.037
10-09	0.004		0.001	0.046					ND			
10-30	0.002		ND	0.0002								0.010
12-14	0.002		ND	0.0002								0.004
1983												
01-15	0.002		0.0009	0.0015								
01-31	0.006		0.00009									
02-23	0.001		0.0005	ND								
04-01	0.003		0.0001	0.0003								
05-03	0.0006		0.00008	0.0003								0.002
05-27	4.0		0.0006	0.0004					0.0001			
06-28	10.0		ND	0.03								0.87
08-01	4.2		ND	0.011								
09-07	9.0		0.0033	0.029								
09-30	97.0		0.0002									
10-31	15.0		0.0011	0.0046								2.0
11-30	10.0		0.0002	0.14								2.6
1984												
01-06	5.7		0.0031	0.012								
02-03	11.0		0.37	0.002					ND			
02-20				0.012								0.28
02-28	7.4		0.0019	0.28					0.0028			
03-13	0.023										7.7	10.6
03-23	5.8		ND	0.100								
05-11	4.6		0.0002	0.057								4.2
06-01	5.7		0.0005	0.051						0.57		
08-24	54.0			0.0039					0.0081 4 tests in '85 & '86 no PCP			
10-07	9.2			0.0099								0.28
12-07	5.5											
12-19	3.7			0.017		0.011						
1985												
05-20	1.9			ND	ND	ND	ND	ND				
06-04	4.5			ND			ND					
11-25				ND								
1986												
03-04	ND		ND			ND	ND					
03-19		ND		0.01			ND	ND				
03-31	1.4				ND							
06-24	ND	ND	ND	ND	ND	ND	ND	ND				
09-24	5.1											
1987												
01-16	0.83	ND	ND	ND	ND		ND	ND	ND			0.091
03-17	3.6											
05-15	2.31											
												(Also Duggan Well tested: ND)

Omaha City wells: No PCP in Numerous 1982-1987 tests
 1000' Site well: No PCP in numerous 1982-1987 tests
 Walnut Creek: No PCP in numerous 1982-1987 tests
 Cricket Creek: No PCP in numerous 1982-1987 tests

Cranmer and Associates, Inc.

Based upon the data generated by GMI, MCE, CAI and others (See preceding table), MMI and CAI believe that two corrections should be made in the Groundwater Targets value for the Site. First, the Groundwater Use factor should be reduced from 3 to 2, because users of domestic wells in the vicinity of the Site had a municipal water supply available nearby which draws from an alternate, unthreatened source. Second, the population served by domestic wells in the immediate vicinity of the Site which could have been affected by contamination in the shallow groundwater system totaled less than ten houses, or a scoring equivalent of 38 people. This near-Site population fell into the 1 to 100 population range that was assigned a scoring value of 1. Use of this revised population value, together with the revised Groundwater Use factor, lowered the Groundwater Targets score from 29 to 16. The revision of the Groundwaters Targets value, in turn, lowered the overall HRS score for the Site from 34.21 originally proposed by EPA to a corrected score of 18.87.

When the corrections for total Quantity of Waste and Groundwater Targets are included in the HRS calculation, the final score for the Site is reduced from 34.21 to 14.52. An itemized comparison of the original and revised MMI-HRS calculations as submitted to EPA by Alan Gates, Esq., follows. A HRS score of 14.52 is far below the level required for a NPL listing.

Cranmer and Associates, Inc.

HRS CALCULATIONS

	Original EPA Proposed	Waste Quantity Revised	Groundwater Targets Revised	Both Revisions
Line 1 - Observed Release	45	45	45	45
Line 4 - Waste Characteristics				
Toxicity/Persistence	18	18	18	18
Hazardous Waste Quantity	<u>8</u>	<u>2</u>	<u>8</u>	<u>2</u>
	26	20	26	20
Line 5 - Targets				
Groundwater Use (X 3)	9	9	6	6
Distance to nearest well/population served	<u>20</u>	<u>20</u>	<u>10</u>	<u>10</u>
	29	29	16	16
Line 1 X Line 4 X Line 5	33,930	26,100	18,720	14,400
Divided by 57,330	0.5918367	0.455259	0.3265306	0.2511773
Multiplied by 100	59.18367	45.5259	32.65306	25.11773
Divided by 1.73	34.2	26.32	18.87	14.52

Cranmer and Associates, Inc.

MMI and CAI recognize that it is EPA's policy not to consider the status of previous response or clean-up actions when scoring a potential NPL site. See Fed. Reg. 31187 (July 16, 1982; 48 Fed. Reg. 40664 September 8, 1983). Nevertheless, MMI and CAI believe that the current status of the Site is relevant when conducting investigation and remedial alternatives. In addition, true and existing HRS scores should be considered when decision makers allocate resources among competing sites.

It is CAI's opinion that the EPA distorted the extent of the risks due to the Site and that no imminent or substantial risk to man or the environment exists due to PCP or Creosote migrating via the groundwater from the Site. CAI does not however advance the position that nothing needs to be done at the Site. Two major sources of pollution exist at the Site; 1) subsurface and 2) dump sites. These sources require remedial action.

Some near surface contamination probably remains at the Site, however, normal degradation processes are already at work. Most surface contamination is a heavy black solid resembling road tar. This surface contamination can be easily removed, is insoluble and presents no risk to groundwater. There is also minute contamination in an area covered by the remains of a sawdust pile. Surface contamination by PCP or the soluble components of creosote, except in newly eroded areas, is not very likely. An explanation for this statement follows.

FOR THE MCKESSON/MASS MERCHANDISERS, INC., INTERESTS

Mr. Bob Barker, MMI Vice President

Bob has been designated site co-ordinator in the EPA scheme. He was top management in Arkwood for 15 years and is by far the more knowledgeable MMI employee on this subject.

BOB'S 5-13-87 Sworn Deposition: (Excerpt)

Question: Do you have a personal opinion as to whether or not the RI/FS is necessary?

BOB'S ANSWER: I have always felt like that the things they (EPA) required were totally ridiculous. I also did not realize we had a choice.

Mr. Douglas Deal:

President of the engineering company who stands to gain from 1 to 15 million in contracts if the site is NPL ranked. Also the expert witness for MMI in June 1 Chancery Court hearing wherein MMI wished for a Court order to start \$2M RI/FS.

Mr. Deal's sworn testimony (excerpt) 6/1/87 in Boone County Chancery Court:

Question: Do you have an opinion as to whether or not this site in fact qualifies or meets the criteria for a Superfund Site?

Mr. Deal's Answer: . . . I believe that the site should not be listed on the final NPL.

FOR THE ARKANSAS DEPARTMENT OF POLLUTION

Mr. Doice Hughes, geologist for ADPC&E. Doice has been overseeing this site since 1981.

Doice's Sworn Deposition 5/___/87

Question: If the Ormond interests presented the state with a plan, in your opinion, would the state consider it?

Doice's Answer: Well, certainly. I would be glad to review any plan for the RI. We would certainly review it, absolutely.

FOR THE ORMOND INTERESTS

Mr. C. C. "Bud" Grisham, Former President and CEO of Arkwood, Inc., and Executive Vice President of MMI.

4-A.
4-C

Bud was constantly in touch with this operation from construction in the early 1960's to dismantling in 1985. He is more familiar with the total history of the site and ~~people~~ of the problem than anyone.

SITE

Bud's Statement: The ~~site~~ should not even be close to listing on the NPL. All tests show conditions are rapidly improving since the operation ceased in 1984. No one, including myself and other employees and customers who were on the site for over 20 years, has ever been sick or harmed in any way by the treating fluids.

We have been trying for months to get the EPA to explain the ranking procedure for this site but they stonewall us in every way possible. The EPA will not offer explanations of their self admitted 6,000 ton error in the original ranking package.

MORRIS F. CRANMER, Ph.D., D.A.T.S.
CRANMER and ASSOCIATES, INC.

Dr. Cranmer, a widely accepted expert in this field, has been retained by the Ormond interests. See attached detailed objections to EPA Hazardous Ranking of the site discussing the many errors and false assumptions.

Cranmer and Associates, Inc.

Calculation of total waste in the Sawdust Pile represented another significant error in the EPA estimate of waste quantity. The pile of sawdust and shavings at the east end of the Site had been generated by wood planing equipment and had been used exclusively on untreated wood. The sawdust and shavings themselves originally contained no treatment chemicals. Evidence obtained by MMI indicated, however, that the Sawdust Pile, in 1986, was contaminated with pentachlorophenol in the low parts per million range. The most reasonable source of the pentachlorophenol observed in the Sawdust Pile was derived from Bob Barker's statement that MMI's used the liquid wastes for dust control purposes.

The wastes in the Sawdust Pile, just as in the case of the Railroad Ditch Pit, were counted twice by EPA. Inclusion of the entire volume of the Sawdust Pile improperly added a substantial volume of soil and sawdust. Mr. Alan Gates also noted that the dimensions attributed to the Sawdust Pile by EPA overstated its volume by more than two orders of magnitude. MMI photographed and surveyed the Sawdust Pile. MMI's measurements indicated that the Sawdust Pile had a surface area of 2,108 square feet and an average depth of six to nine inches. These dimensions resulted in a total volume of less than 60 cubic yards. CAI estimated that in May 1987, the volume of the Sawdust Pile was less than 40 cubic yards.

Why was there such a large discrepancy for the Sawdust Pile? EPA's estimate of 6,111 cubic yards for the volume of the sawdust pile had been based upon an April 1985 memorandum from Doice Hughes, a geologist with ADPC&E, to Tim Perdue in the EPA Region VI Office. According to Mr. Gates, MMI discussed its photograph and survey with Mr. Hughes. Mr. Hughes indicated that the dimensions he originally reported to EPA were only an estimate and later indicated that he did not question the accuracy of MMI's measurements. CAI estimated that less than one pound of PCP exists in the Sawdust Pile. EPA has been inconsistent in its treatment of the Sawdust Pile at the Site as a hazardous waste. For example, EPA, in PD-4 suggested that discarded PCP-treated wood could be buried or burned in incinerators.

The obvious exaggeration by EPA of quantities of PCP and creosote present at the Site makes the situation appear far worse than it is. It is the opinion of CAI that the Site should not be included on the NPL. The Site's HRS score, when calculated correctly, clearly does not justify NPL inclusion.

NOTE: See 2-2-87 Video Tape from # 2350 to 2390

EPA/OMAHA PUBLIC MEETING

In answer to the question: "How dangerous is Penta in the Water?"

Larry Wright, EPA Director, Hazardous Waste Division, Dallas, TX, is quoted as follows:

Assuming the water has 1.05 parts per million for chronic exposure if a person were to consume 2 liters of the water every day of their lives for 70 years at a level exceeding 1.05 ppm they would stand a one in a million improved chance of contacting cancer and that's what the standards are based on."

Quoting Ruth Izraeli at above meeting (see video tape at # 2820 to 2855)

The concentration of Penta we have seen in the Cricket Spring at our last sampling was about 4 parts per million and the recommended drinking water level for people is 1 part per million so its 4 times higher. If a person were to drink that water for 70 years he might very slightly increase his chances of getting cancer or whatever, but again the water is not so horribly contaminated that if your animals were to drink it that they would die. If might not harm them at all.

MCKESSON CRICKET 11/87 - .830 PPM

2,4,6-trichlorophenol, ...
—The two remaining chemicals, with detectable levels found in almost all of the 199 children studied, were pentachlorophenol, or PCP, and 2,5-dichlorophenol. "Literature also indicated that they were present in low concentrations in the vast majority of persons tested in the United States," the Health Department said in a news release.

The PCP median value was 15 ppb among Jacksonville children, and 14 ppb among Conway children, Ms. To said. "The median level is fairly low," she said. She said people routinely come in contact with PCP, which is used as a wood preservative, in herbicides and pesticides, as glue on candy wrappers and in ... on jars used in home canning.

of

Audience: Has anybody ever decided how much is unsafe or how much is safe?

RI: I believe that the health advisory limit of PCP is 1.05 parts per million. This is assuming you are drinking a couple of liters a day for your entire lifetime.

AW: When they look at the threat posed by chemicals they look at two things. What is called acute toxicity, which is where you drank it for a short time and it really give you problems, and the other thing they look at for setting standards is cronic exposure, cronic toxicity, and that is what Ruth is talking about. If a person were to consume 2 liters of this water every day of their lives for 70 years at a level exceeding 1.05 parts per million they would stand a 1 in a million improved chance of contacting cancer and that is what the standard is based on.

Audience: Your talking about ingestion of the water what about bathing in the water?

AW: Well we have to make the determination how the water is going to get into you or effect you and generally the primary route for PCPs in water is thru ingestion, drinking, the actual absorption thru the skin in drinking water at those levels is probably minimal.

Audience: One of the wells is probably a mile and the other 3/4 of a mile and we have never found any problem in our well and we have to have them tested every week.

RI: I don't think they are tested for the same chemical but they are clean we have seen the results. The public well is a deep well and it is approximately 2,000 feet deep and we think that is probably why the water is probably clean there.

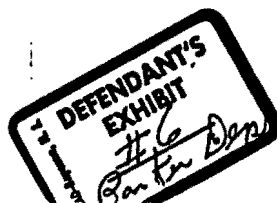
Audience: How about our animals that drink the water and we eat them, like the livestock and the chickens?

RI: The only contaminated surface water the animals might be able to drink is along the side of Cricket Road where Cricket Spring comes out and flows into the ditch right along there. I'm not sure the concentration of penta we have seen in Cricket Spring at our last sampling was about 4 parts per million and the drinking water levels for people, the recommended levels, is 1 part per million, so it is four times higher. So if a person were to drink that water for 70 years he might very slightly increase his chances of getting cancer, whatever, but again, the water is not so horribly contaminated that if your animals were to drink it, I'm sure that they wouldn't die, it might not harm them at all. If you could prevent your animals from drinking right along that small area that would probably be advisable.

Audience: Does that flow into Cricket Creek also, that spring?

RI: No, whenever we have been to the site it has not extended to Cricket Creek it goes back down into the ground before it gets to the creek.

AW: The area I think that Ruth is talking about (the ditch) is on the south side.



4-1

the most serious sites first, focus its efforts on those sites, and take into account the many other sites in need of attention when deciding how much to spend on any particular one. Information available on the Arkwood site was ranked by the HRS, probably, initially by the State. The sites are ranked by HRS and, through a rulemaking process requiring public comment, are placed on the National Priorities List (NPL). Only NPL sites are eligible for long-term remedial response using Superfund money. Sites are proposed for the NPL approximately three times per year. As of October 1986, there were 888 proposed and final sites on the list.

It should be noted that when an emergency occurs which poses an immediate threat to public health or to the environment, EPA can and will respond, whether or not the hazardous site has been classified as a "national priority". Arkwood is still in the proposed status. The EPA cannot act until the site is placed in the NPL since no imminent hazard exists.

Enforcement

When companies are willing to take the initiative to clean up their sites, they can negotiate an agreement with EPA under which the company undertakes the work. In other cases, EPA's lawyers and enforcement staff, working with the Department of Justice (DOJ), have had to bring legal action against the responsible parties. Before EPA begins a remedial action, it informs the responsible parties of its plans and gives them the opportunity to undertake the work.

CERCLA gives EPA several legal methods for compelling responsible parties to assume financial responsibility for the cleanup. Under section 106, EPA can issue an "administrative order" to compel a responsible party to clean up a site where there may be an imminent and substantial threat to human health or the environment. An administrative order summarizes the terms of the cleanup agreement, including sampling requirements, cleanup techniques, and timetables. EPA either negotiates the administrative order with the responsible party, or develops the order and issues it on its own. If violated, these orders may be enforced by the courts. This position would be grave!

EPA, through DOJ, may ask a Federal district court to require the responsible party to respond to any threat posed by the site. The court may also agree to issue a "consent decree" based upon negotiations between EPA and the responsible party. A consent decree also provides for long-term EPA oversight of a cleanup action managed by the responsible party. This position is not much better.

EPA also has the option to use Superfund money and then to recover cleanup costs from the responsible party. Under section 106 of CERCLA, courts can hold certain past and present owners and operators of a site, as well as waste generators and transporters, liable for complete cleanup costs. This position is a financial disaster.

When there is more than one Potentially Responsible Party (PRP), negotiations between the responsible parties may be sufficient to determine the relative

IN THE CHANCERY COURT OF BOONE COUNTY, ARKANSAS
~~XXXXXX~~

Received
9-22-86

SUMMONS

FOURTEENTH DISTRICT
BOONE COUNTY, ARKANSAS

Plaintiff: Arkansas Department of Pollution
Control & Ecology

SUMMONS

vs.

Defendant: Hallie C. Ormond, Arkwood, Inc.,
Mountain Enterprises, Inc., et al

Case Number: E-86-293

Plaintiff's Attorney: Phillip Deisch

(name and address) P.O. Box 9583 Little Rock, AR 72219

THE STATE OF ARKANSAS TO DEFENDANT: ARKWOOD, INC.

NOTICE

1. You are hereby notified that a lawsuit has been filed against you; the relief asked is stated in the attached complaint.
2. The attached complaint will be considered admitted by you and a judgment by default may be entered against you for the relief asked in the complaint unless you file a pleading and thereafter appear and present your defense. Your pleading or answer must meet the following requirements:
 - A. It must be in writing, and otherwise comply with the Arkansas Rules of Civil Procedure.
 - B. It must be filed in the court clerk's office within 20 days from the day you were served with this summons.
3. If you desire to be represented by an attorney you should immediately contact your attorney so that an answer can be filed for you within the time allowed.
4. ☐ Additional notices:
☐ Standing Restraining Order attached.

Witness my hand and the seal of the court this
15th day of August, 19 86

Helen Speer
Circuit & Chancery Clerk
P.O. Box 957
Harrison, Arkansas 72601

Helen Speer
Clerk
Jeffrey L. Rogers
D.C.

IN THE CHANCERY COURT OF BOONE COUNTY, ARKANSAS

ARKANSAS DEPARTMENT OF
POLLUTION CONTROL AND
ECOLOGY

PETITIONER

V.

CIVIL ACTION NO. _____

HALLIE C. ORMOND,
ARKWOOD, INC., MOUNTAIN
ENTERPRISES, INC., C. C.
GRISHAM, MARY JO GRISHAM,
and MASS MERCHANDISERS, INC.

RESPONDENTS

COMPLAINT IN EQUITY

Comes Petitioner, Arkansas Department of Pollution Control and Ecology, and by its attorney, Phillip Deisch, for its Complaint states as follows:

1. Petitioner is an agency of the State of Arkansas charged with the administration and enforcement of the Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended; Ark. Stat. Ann. § 82-1901 et seq.) and the Remedial Action Trust Fund Act (Act 479 of 1985; Ark. Stat. Ann. § 82-4712 et seq.).

2. Respondent, Hallie C. Ormond (hereinafter "Ormond") owns real property and fixtures located in Section 27, Township 21 North, Range 21 West in Boone County, Arkansas (hereinafter the "Arkwood site").

3. A wood treating plant has been operated at the Arkwood site, beginning at a time unknown to Petitioner but believed to have begun in 1961 and operations continued through 1984.

4. Respondents, Ormond and C. C. Grisham, are former operators of the wood treating plant at the Arkwood site.

5. Respondent, Arkwood, Inc., an Arkansas corporation, incorporated in 1965 and dissolved in 1978, is a former operator of the wood treating plant at the Arkwood site.

5-6
a lack of interest on the part of the agency. As long as a private party is moving ahead, then the agency may not see an immediate need to insert itself by filing a court action or by initiating its own study. Finally, should there ever be a cost recovery action by the EPA, ~~the agency's policies~~ in proving liability are 1) volume of discharge, and 2) ~~level of cooperation~~ throughout the clean-up process. This is important for minor defendants because even if they can prove no participation in the discharge, their level of liability may rise if ~~they are viewed as obstructing the agency~~ in carrying out its responsibility.

More specifically, the outcome of the particular motions could affect the ultimate allocation of liability as between the PRPs. Should we be able to block the motions in whole, we will essentially play right into the opposing counsel's hands. He will then be able to say to the EPA that, as a private party, his client can do no more to carry out the agency's approved plan because of the lack of cooperation of the other private parties. Thus, it will become incumbent upon the federal authorities to step in. The problem of allowing this to happen is ~~the agency's attitude toward uncooperative defendants~~. Under the Superfund Amendments and Reauthorization Act of 1986 (SARA), the EPA has full access to sites, and former owners are potentially as liable as anyone else.

On the other hand, should the motions be granted in whole, a new set of problems arise. The Work Plan as formulated contains a number of damaging elements calculated to weaken the position of Mr. Ormond and the other individuals. For example, the description of the site operations and practices at 2.1.1.3 includes a number of statements about the history of the site that are totally unacceptable, tangential to the study, and based upon information from an employee of MMI. On page 2-6, the third full paragraph reads:

During the early years of operation, few precautions were taken to prevent secondary releases of wood treating solutions to the environment. The waste oil was disposed into a sinkhole located near the treating cylinder room. Disposal to the sinkhole was discontinued prior to 1971.

The seventh full paragraph then begins:

Under MMI management, several changes were made in plant operations and waste disposal. The sump drain line was improved to provide for more efficient reuse of oil. The air pressure/vacuum time was increased during treatment process to eliminate/reduce treated wood "bleeding"....

On page 2-94, under the heading of Community Relations Support, the second paragraph reads:

5-C

To date, few community relations activities involving large groups have been conducted at the Arkwood site. The EPA, ADPC& E, and MMI representatives have been in contact with one another and with affected individuals. No public meetings have been held to date.

Similarly, under Tab A, Chronology of Events at Arkwood Plant, Omaha, Arkansas, heading 1971-1972:

Use of sinkhole for sludge disposal terminated.
Pipe installed from treating building to railroad embankment for sludge disposal in railroad ditch.
Quantity of sludge decreased due to increased product costs and more efficient use of treating solutions.

Finally, under Tab E, Item 3, the third paragraph reads

From 1962 to 1973, few precautions were taken to prevent secondary releases of wood treating solutions to the environment. The wastes generated at the site consisted of three major constituents: creosote, pentachlorophenol (PCP), and wood treating oil (used as a solvent for the treatment products).

The overall effect of these and other statements is to build a considerable record against Mr. Ormond and Mr. Grisham; particularly if the approval is granted in the manner that has been requested by MMI. Clearly, these statements must be pointed out to the court as going to the question of liability, which is not at issue here. Thus, the question becomes whether a court order can be obtained that will allow an initial study for the purpose of minimizing costs, but will protect the individual defendants from any premature opinions or conclusions as to apportionment of liability.

In conclusion, the goal should be to obtain an order that would 1) carve out a limited access solely for the purpose of implementing the Work Plan; 2) enjoin MMI from taking any action that could cause environmental harm or increase the ultimate expense of any investigation or remediation that may be required; 3) hold MMI liable for any damage done during the course of the study; 4) require MMI to send copies of any and all material sent to EPA or ADPC & E to the individual defendants; 5) stipulate that the order nor the plan does not address the question of liability in any way; and 6) stipulate that the court is not concluding or even suggesting that this plan is the appropriate RI/FS for the site, or that "approval" in any way determines the nature of any remedial action that might be necessary. The bottom line is that it is best not to have either the State or



DTB:CEJ:jsc
90-11-2-190

Washington, D.C. 20530

May 1, 1987

Bill F. Doshier, Esq.
Doshier & Bowers
P.O. Box 1797
Harrison, Arkansas 72601

Re: United States v. Ormond and Grisham

Dear Mr. Doshier:

On behalf of the Environmental Protection Agency, I hereby request that Mr. Hallie Ormond and Mr. C.C. Grisham grant immediate access to the Arkwood site in Omaha, Boone County, Arkansas to Mass Merchandizing, Inc. (MMI), EPA's authorized representative, to conduct the Remedial Investigation and Feasibility Study at the site.

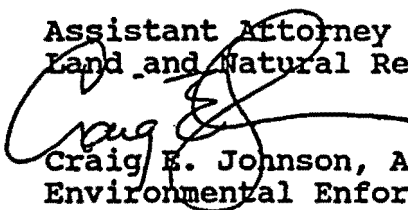
Pursuant to Section 104 (e)(5)(b) of the Superfund Amendments and Reauthorization Act of 1986, ~~failure to grant access to the site may carry a penalty of \$25,000 for each day that access is denied.~~

~~Request a response to this letter by May 5, 1987, 4:00 pm EST.~~ Since Mr. Ormond and Mr. Grisham have in the past refused MMI access to the site, a failure to respond to this letter by the above date will be deemed a refusal to grant access. My phone number is (202) 633-3332.

Sincerely yours,

Assistant Attorney General
Land and Natural Resources Division

By:


Craig E. Johnson, Attorney
Environmental Enforcement Section

cc:
James Ingram, Esquire
Matthew Fleming, AUSA
Western District of Arkansas

CCG & RI & BARRY NASH

NO, to new package, in DC and will ^{NOT} be released until 6-15-87.

NO, to 6,111 ton questions, not public knowledge. Put my request in writing to Barry Nash.

RI: If you get ~~the ranking~~ now we will ~~not be able to~~ have it back on ~~the 1988~~ as the 1988 "model" (formula) is ~~even higher~~.

RI: New ranking (reevaluation) is 28.5, or I am not sure. We ~~could have made it higher~~.

LB: 4/22/86 comments to Bud ranking no matter - we can superfund it without 28.5.

RI: If you want original HRS ranking package write a formal request.

CCG 4/15/87



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VI
1201 ELM STREET
DALLAS, TEXAS 75270

CERTIFIED MAIL RETURN RECEIPT REQUESTED

December 8, 1986

Mr. Bill F. Doshier
Doshier & Bowers
Box 1797
Harrison, Arkansas 72601

Dear Mr. Doshier:

Thank you for meeting with Ruth Izraeli and me on November 18, 1986 to discuss your client's position regarding cooperation with the Environmental Protection Agency's (EPA) efforts to complete the Remedial Investigation and Feasibility Study (RI/FS) at the Arkwood, Inc. facility.

As you know, EPA has entered into an Administrative Order on Consent (AO) with Mass Merchandisers, Inc. (MMI) to perform an RI/FS for the Arkwood site (A copy of the AO is enclosed). Before this AO was entered, all potentially responsible parties (PRPs) known to EPA at the time (including your client Bud Grisham and Hallie Ormond) were offered the opportunity to undertake the RI/FS. Neither Mr. Grisham nor Mr. Ormond offered to undertake or participate in the RI/FS.

Only MMI expressed interest in participating in the preparation of the RI/FS. Under Section 104(a) of the Comprehensive Environmental Response and Liability Act of 1980 (CERCLA) EPA allowed MMI to perform the RI/FS for the Arkwood, Inc. site after determining that MMI was capable of conducting the study properly.

In October, Congress passed the Superfund Amendments and Reauthorization Act of 1986 (SARA). I have enclosed a copy of SARA for your information. SARA specifically provides, in the amendment to Section 104(a),

"When the President determines that such action will be done properly and promptly by the owner or operator of the facility or vessel or by any other potentially responsible party, the President may allow such person to carry out the action, conduct the remedial investigation, or conduct the feasibility study in accordance with section 122. . . In no event shall a potentially responsible party be subject to a lesser standard of liability, receive preferential treatment, or in any other way, whether direct or indirect, benefit from any such arrangements . . . with respect to the release or facility in question."

The AO entered by EPA and MMI provides for extensive control of the RI/FS process by EPA which will assure that the results of the study are objective and not slanted in favor of MMI.

BILL RCD THIS 12/19/86

(9) 12/1/86

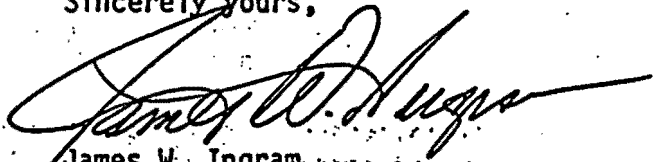
In light of the language of Section 104(a) of CERCLA as amended by SARA and the provisions of the AO, your client's apprehension that MMI will be able somehow to effect the outcome of the determination of liability with respect to the Arkwood, Inc. site as a result of conducting the RI/FS is unfounded.

As we discussed in our meeting, access to the Arkwood, Inc. site will be necessary as soon as the final RI/FS Work Plan is approved by EPA. In light of your client's refusal to provide access to the site to undertake the necessary investigation, it will be necessary for EPA to obtain access through the United States District Court unless voluntary assurance of access has been granted within one week of today.

Under Section 104(e) of CERCLA, as amended by SARA, any officer, employee or representative of EPA is entitled to enter the Arkwood, Inc. site for the purpose of determining the need for response action or for choosing or taking any response action under CERCLA.

There appears to be no valid basis for refusal to allow access to MMI. ~~As mentioned in our meeting, the access to the site by the government in obtaining access to the site to do the RI/FS, and the denial of access to your client under CERCLA for no apparent reason.~~ I hope you and your client will reconsider granting access to MMI voluntarily.

Sincerely yours,



James W. Ingram
Assistant Regional Counsel